SEQUENCE LISTING

<110> AquaBio Product Sciences, LLC
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Russell, David R.
Nearing, Jacqueline
Betka, Marlies

<120> Methods for Raising Pre-Adult Anadromous Fish

<130> 2213.1004-000

<140> US 09/687,477
<141> 2000-10-12

<160> 23

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<211> 594
<212> DNA
<213> Atlantic Salmon

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gttctcactc atctgctgtt tctccagttc cctcatcttc attggtgaac cccaggactg 180
gacatgccgt ctacgccagc ctgcattcgg gataagtttt gttctctgca tctcctgcat 240
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cattgatgag ataattttca ttacatgcaa tgagggctct atgatggcgc ttggcttcct 480
aattgggtac acatgcctgc tggcagccat atrcttcttc tttgcattta aatcacgaaa 540
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<213> Atlantic Salmon

<220>
<223> Xaa=any amino acid

<400> 2

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            20                  25                  30
Arg Glu Leu Ser Tyr Leu Leu Leu Phe Ser Leu Ile Cys Cys Phe Ser
        35                  40                  45
Ser Ser Leu Ile Phe Ilė Gly Glu Pro Gln Asp Trp Thr Cys Arg Leu
    50                  55                  60
Arg Gln Pro Ala Phe Gly Ile Ser Phe Val Leu Cys Ile Ser Cys Ile
65                  70                  75                  80
Leu Val Lys Thr Asn Arg Val Leu Leu Val Phe Glu Ala Lys Ile Pro
                85                  90                  95
Thr Ser Leu His Arg Lys Trp Trp Gly Leu Asn Leu Gln Phe Leu Leu
            100                 105                 110
Val Phe Leu Phe Thr Phe Val Gln Val Met Ile Cys Val Val Trp Leu
        115                 120                 125
Tyr Asn Ala Pro Pro Ala Ser Tyr Arg Asn His Asp Ile Xaa Asp Glu
    130                 135                 140
Ile Ile Phe Ile Thr Cys Asn Glu Gly Ser Met Met Ala Leu Gly Phe
145                 150                 155                 160
Leu Ile Gly Tyr Thr Cys Leu Leu Ala Ala Ile Xaa Phe Phe Phe Ala
                165                 170                 175
Phe Lys Ser Arg Lys Leu Pro Glu Asn Phe Thr Glu Ala Lys Phe Ile
            180                 185                 190
Thr Phe Ser Met Leu Ile Phe
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gacatgccgt ctacgccagc ctgcattcgg gataagtttt gttctctgca tctcctgcat 240
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cattgatgag ataattttca ttacatgcaa tgagggctct atgatggcgc tcggcttcct 480
aattgggtac acatgcctgc tggcagccat atgcttcttc tttgcattta aatcacgaaa 540
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<213> Artic Char

<220>
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35 40 45
Ser Ser Leu Ile Phe Ile Gly Glu Pro Gln Asp Trp Thr Cys Arg Leu
50 55 60
Arg Gln Pro Ala Phe Gly Ile Ser Phe Val Leu Cys Ile Ser Cys Ile
65 70 75 80
Leu Val Lys Thr Asn Arg Val Leu Leu Val Phe Glu Ala Lys Ile Pro
85 90 95
Thr Ser Leu His Arg Lys Trp Trp Gly Leu Asn Leu Gln Phe Leu Leu
100 105 110
Val Phe Leu Phe Thr Phe Val Gln Val Met Ile Cys Val Val Trp Leu
115 120 125
Tyr Asn Ala Pro Pro Ala Ser Tyr Arg Asn His Asp Ile Xaa Asp Glu
130 135 140
Ile Ile Phe Ile Thr Cys Asn Glu Gly Ser Met Met Ala Leu Gly Phe
145 150 155 160
Leu Ile Gly Tyr Thr Cys Leu Leu Ala Ala Ile Cys Phe Phe Phe Ala
165 170 175
Phe Lys Ser Arg Lys Leu Pro Glu Asn Phe Thr Glu Ala Lys Phe Ile
180 185 190
Thr Phe Ser Met Leu Ile Phe
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<212> DNA
<213> Trout

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<212> PRT
<213> Trout

<220>
<223> Xaa = Any amino acid

<400> 6

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Arg Glu Leu Ser Tyr Leu Leu Leu Phe Ser Leu Ile Cys Cys Phe Ser
        35                  40                  45
Ser Ser Leu Ile Phe Ile Gly Glu Pro Gln Asp Trp Thr Cys Arg Leu
    50                  55                  60
Arg Gln Pro Ala Phe Gly Ile Ser Phe Val Leu Cys Ile Ser Cys Ile
65                  70                  75                  80
Leu Val Lys Thr Asn Arg Val Leu Leu Val Phe Glu Ala Lys Ile Pro
                85                  90                  95
Thr Ser Leu His Arg Lys Trp Trp Gly Leu Asn Leu Gln Phe Leu Leu
            100                 105                 110
Val Phe Leu Phe Thr Phe Val Gln Val Met Ile Cys Val Val Trp Leu
        115                 120                 125
Tyr Asn Ala Pro Pro Ala Ser Tyr Arg Asn His Asp Ile Xaa Asp Glu
    130                 135                 140
Ile Ile Phe Ile Thr Cys Asn Glu Gly Ser Met Met Ala Leu Gly Phe
145                 150                 155                 160
Leu Ile Gly Tyr Thr Cys Leu Leu Ala Ala Ile Cys Phe Phe Phe Ala
                165                 170                 175
Phe Lys Ser Arg Lys Leu Pro Glu Asn Phe Thr Glu Ala Lys Phe Ile
            180                 185                 190
Thr Phe Ser Met Leu Ile Phe
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<210> 7
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<212> DNA
<213> Chum Salmon

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gttctcactt atctgctgtt tttccagctc cctcatcttc attggtgaac cccaggactg 180
gacatgccgt ctacgccagc ctgcattcgg gataagtttt gttctctgca tctcctgcat 240
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tcgtaagtgg tgggggctaa acttgcagtt cctgttggtg ttcctgttca catttgtgca 360
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cattgatgag atcattttca ttacatgcaa tgagggctct atgatggcgc ttggcttcct 480
aattgggtac acatgcctgc tggcagccat atgcttcttc tttgcattta aatcacgaaa 540
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<212> PRT
<213> Chum Salmon

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35 40 45
Ser Ser Leu Ile Phe Ile Gly Glu Pro Gln Asp Trp Thr Cys Arg Leu
50 55 60
Arg Gln Pro Ala Phe Gly Ile Ser Phe Val Leu Cys Ile Ser Cys Ile
65 70 75 80
Leu Val Lys Thr Asn Arg Val Leu Leu Val Phe Glu Ala Lys Ile Pro
85 90 95
Thr Ser Leu His Arg Lys Trp Trp Gly Leu Asn Leu Gln Phe Leu Leu
100 105 110
Val Phe Leu Phe Thr Phe Val Gln Val Met Ile Cys Val Val Trp Leu
115 120 125
Tyr Asn Ala Pro Pro Ala Ser Tyr Arg Asn His Asp Ile Asp Glu Ile
130 135 140
Ile Phe Ile Thr Cys Asn Glu Gly Ser Met Met Ala Leu Gly Phe Leu
145 150 155 160
Ile Gly Tyr Thr Cys Leu Leu Ala Ala Ile Cys Phe Phe Phe Ala Phe
165 170 175
Lys Ser Arg Lys Leu Pro Glu Asn Phe Thr Glu Ala Lys Phe Ile Thr
180 185 190
Phe Ser Met Leu Ile
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<210> 9
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<212> DNA
<213> Coho Salmon

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gttctcactt atctgctgtt tctccagctc cctcatcttc attggtgaac cccaggactg 180
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cctggtcaaa actaaccgag tacttctagt gttcgaagca aagatcccca ccagtctcca 300
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cattgatgag atcattttca ttacatgcaa tgagggctct atgatggcgc ttggcttcct 480
aattgggtac acatgcctgc tggcagccat atgcttcttc tttgcattta aatcacgaaa 540
actgccagag aattttacmg aggctaagtt catcaccttc agcatgctca tctt 594

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<212> PRT
<213> Coho Salmon

<220>
<223> Xaa= Any Amino Acid

<400> 10

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Arg Glu Leu Ser Tyr Leu Leu Leu Phe Ser Leu Ile Cys Cys Phe Ser
        35                  40                  45
Ser Ser Leu Ile Phe Ile Gly Glu Pro Gln Asp Trp Thr Cys Arg Leu
    50                  55                  60
Arg Gln Pro Ala Phe Gly Ile Ser Phe Val Leu Cys Ile Ser Cys Ile
65                  70                  75                  80
Leu Val Lys Thr Asn Arg Val Leu Leu Val Phe Glu Ala Lys Ile Pro
                85                  90                  95
Thr Ser Leu His Arg Lys Trp Trp Gly Leu Asn Leu Gln Phe Leu Leu
            100                 105                 110
Val Phe Leu Phe Thr Phe Val Gln Val Met Ile Cys Val Val Trp Leu
        115                 120                 125
Tyr Asn Ala Pro Pro Ala Ser Tyr Arg Asn His Asp Ile Asp Glu Ile
    130                 135                 140
Ile Phe Ile Thr Cys Asn Glu Gly Ser Met Met Ala Leu Gly Phe Leu
145                 150                 155                 160
Ile Gly Tyr Thr Cys Leu Leu Ala Ala Ile Cys Phe Phe Phe Ala Phe
                165                 170                 175
Lys Ser Arg Lys Leu Pro Glu Asn Phe Thr Glu Ala Lys Phe Ile Thr
            180                 185                 190
Phe Ser Met Leu Ile
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<212> DNA
<213> King Salmon

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gttctcactt atctgctgtt tttccagctc cctcatcttc attggtgaac cccaggactg 180
gacatgccgt ctacgccagc ctgcattcgg gataagtttt gttctctgca tctcctgcat 240
cctagtcaaa actaaccgag tacttctagt gttcgaagca aagatcccca ccagtctcca 300
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cattgatgag atcattttca ttacatgcaa tgagggctct atgatggcgc ttggcttcct 480
aattgggtac acgtgcctgc tggcagccat atgcttcttc tttgcattta aatcacgaaa 540
actgccagag aattttaccg aggctaagtt cattaccttc agcatgctca tctt 594

<210> 12
<211> 197
<212> PRT
<213> King Salmon

<400> 12
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Arg Glu Leu Ser Tyr Leu Leu Leu Phe Ser Leu Ile Cys Cys Phe Ser
35 40 45
Ser Ser Leu Ile Phe Ile Gly Glu Pro Gln Asp Trp Thr Cys Arg Leu
50 55 60
Arg Gln Pro Ala Phe Gly Ile Ser Phe Val Leu Cys Ile Ser Cys Ile
65 70 75 80
Leu Val Lys Thr Asn Arg Val Leu Leu Val Phe Glu Ala Lys Ile Pro
85 90 95
Thr Ser Leu His Arg Lys Trp Trp Gly Leu Asn Leu Gln Phe Leu Leu
100 105 110
Val Phe Leu Phe Thr Phe Val Gln Val Met Ile Cys Val Val Trp Leu
115 120 125
Tyr Asn Ala Pro Pro Ala Ser Tyr Arg Asn His Asp Ile Asp Glu Ile
130 135 140
Ile Phe Ile Thr Cys Asn Glu Gly Ser Met Met Ala Leu Gly Phe Leu
145 150 155 160
Ile Gly Tyr Thr Cys Leu Leu Ala Ala Ile Cys Phe Phe Phe Ala Phe
165 170 175
Lys Ser Arg Lys Leu Pro Glu Asn Phe Thr Glu Ala Lys Phe Ile Thr
180 185 190
Phe Ser Met Leu Ile
195

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<211> 594
<212> DNA
<213> Pink Salmon

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gttctcactt atctgctgtt tttccagctc cctcatcttc attggtgaac cccaggactg 180
gacatgccgt ctacgccagc ctgcattcgg gataagtttt gttctctgca tctcctgcat 240
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cattgatgag atcatttca ttacatgcaa tgagggctct atgatggcgc ttggcttcct 480
aattgggtac acatgcctgc tggcagccat atgcttcttc tttgcattta aatcacgaaa 540
actgccagag aattttactg aggctaagtt catcaccttc agcatgctca tctt 594

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<212> PRT
<213> Pink Salmon

<400> 14

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Arg Glu Leu Ser Tyr Leu Leu Leu Phe Ser Leu Ile Cys Cys Phe Ser
        35                  40                  45
Ser Ser Leu Ile Phe Ile Gly Glu Pro Gln Asp Trp Thr Cys Arg Leu
    50                  55                  60
Arg Gln Pro Ala Phe Gly Ile Ser Phe Val Leu Cys Ile Ser Cys Ile
65                  70                  75                  80
Leu Val Lys Thr Asn Arg Val Leu Leu Val Phe Glu Ala Lys Ile Pro
                85                  90                  95
Thr Ser Leu His Arg Lys Trp Trp Gly Leu Asn Leu Gln Phe Leu Leu
            100                 105                 110
Val Phe Leu Phe Thr Phe Val Gln Val Met Ile Cys Val Val Trp Leu
        115                 120                 125
Tyr Asn Ala Pro Pro Ala Ser Tyr Arg Asn His Asp Ile Asp Glu Ile
    130                 135                 140
Ile Phe Ile Thr Cys Asn Glu Gly Ser Met Met Ala Leu Gly Phe Leu
145                 150                 155                 160
Ile Gly Tyr Thr Cys Leu Leu Ala Ala Ile Cys Phe Phe Phe Ala Phe
                165                 170                 175
Lys Ser Arg Lys Leu Pro Glu Asn Phe Thr Glu Ala Lys Phe Ile Thr
            180                 185                 190
Phe Ser Met Leu Ile
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<213> Sockeye Salmon

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actgccagag aattttacag aggctaagtt catcaccttc agcatgctca tctt 594

<210> 16
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<212> PRT
<213> Sockeye Salmon

<220>
<223> Xaa=Any Amino Acid

<400> 16

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            20                  25                  30
Arg Glu Leu Ser Tyr Leu Leu Leu Phe Ser Leu Ile Cys Cys Phe Ser
        35                  40                  45
Ser Ser Leu Ile Phe Ile Gly Glu Pro Gln Asp Trp Thr Cys Arg Leu
    50                  55                  60
Arg Gln Pro Ala Phe Gly Ile Ser Phe Val Leu Cys Ile Ser Cys Ile
65                  70                  75                  80
Leu Val Lys Thr Asn Arg Val Leu Leu Val Phe Glu Ala Lys Ile Pro
                85                  90                  95
Thr Ser Leu His Arg Lys Trp Trp Gly Leu Asn Leu Gln Phe Leu Leu
            100                 105                 110
Val Phe Leu Phe Thr Phe Val Gln Val Met Ile Cys Val Val Trp Leu
        115                 120                 125
Tyr Asn Ala Pro Pro Ala Ser Tyr Arg Asn His Asp Ile Asp Glu Ile
    130                 135                 140
Ile Phe Ile Thr Cys Asn Glu Gly Ser Met Met Ala Xaa Gly Phe Leu
145                 150                 155                 160
Ile Gly Tyr Thr Cys Leu Leu Ala Ala Ile Cys Phe Phe Phe Ala Phe
                165                 170                 175
Lys Ser Arg Lys Leu Pro Glu Asn Phe Thr Glu Ala Lys Phe Ile Thr
            180                 185                 190
Phe Ser Met Leu Ile
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<210> 17
<211> 4134
<212> DNA
<213> Dogfish Shark

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